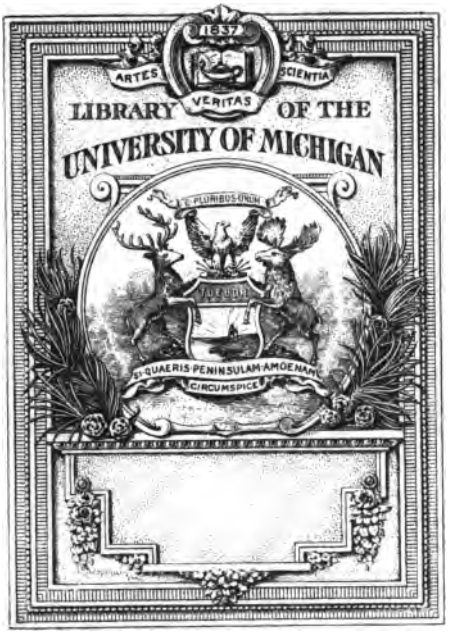
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YELLOW FEVER.

A CHAPTER

ON

YELLOW FEVER,

BY

Compliments of

WM. J. MURRELL, A. M., M. D.

Originally prepared in concise form for Dr. Adam Miller's "Plain Talk to the Sick, with Directions for Homœopathic Treatment," and opportunely enlarged to the present Essay by request of friends of Homœopathy in Mobile.

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A CHAPTER ON YELLOW FEVER.

DEFINITION.

A specific malignant fever; epidemic, infectious, and contagious disease; endemic in the West Indies. Introduced into the United States in the latter quarter of the eighteenth century; attacking the same person usually but once. Needing a temperature of 72° Fahr. of several weeks continuance for its production and propagation, but limited almost to a geographical space between 20° S. and 40° N. Confined chiefly to aggregations of human beings common to cities, garrisoned forts, and ships; independent of malaria, and capable of distant transmission, or lying dormant under the influences of frost, and regenerating into activity with the concurrences of causes which originally developed the disease.

CHARACTER.

We have a practical illustration of the germs of yellow fever lying dormant under effect of frost in Memphis and New Orleans this past winter, verifying the position taken by the Homœopathic Yellow Fever Commission upon the necessity of *strict sanitary measures* in connection with *marine quarantine*. Says the Commission, "We thus have four shades or degrees of yellow fever visitations; sporadic cases, local and limited outbreaks; epidemics from naturalized germs, and epidemics from importation." In Memphis and New Orleans this season, in consequence of these conditions the disease reasserted its power, but only in sporadic form; not occasioning an epidemic in the latter city, either for want of material, the non-conducting condition of the atmosphere, or the rigid precautionary measures; as the poison itself, or the *treatment*, was sufficiently *active* when out of twenty-two subjects, nine died up to September 5th, and out of the four members attacked in the family of the lamented Hood, three

died—a loss of over 59 per cent. in general, and 75 per cent. in one family—nor is it uncommon by the same treatment to witness a whole family of half a dozen members die. This is not mentioned in any spirit of mere criticism, nor shall any remarks in this paper drawing a comparison of the two treatments, be presented with any other object than a humanitarian one, and with the sole object in view of inviting investigation beyond the ancient dogmas of Hippocrates, and the absurd theorizing ever since, divided into almost as many *contraries* as there have been authors, and as one of their own writers well observes; "no one thing, no one mode, no one system, no one kind of practice," which is down to the present day still further exemplified by the [redacted], and to the public dreaded alternative of Dr. Choppin: "I make the suggestion that physicians be advised to experiment."

No wonder the gallant Hood said to Dr. Bemiss: "Doctor, if you cannot overcome the enemy by the *regular* method, do not try any *experiments*."

In Memphis we have the same facts presented—the germs lying dormant under the influence of frost, and regenerating into activity with the return of the temporarily lost factor, heat.

With such established facts now before us, it is evident that delay in the wise and prompt appointment of sanitary enactments to prevent the importation of the yellow fever poison, with such additional measures as modern science may be able to [redacted] to root out the pestilential evils surrounding our very doors, will be suicidal to life and commerce, and scarcely more so than is the present inland siege laid upon each city, rather partaking of the spirit of business rivalry than of any medico-legal measure. But as one of the objects of this article is to show that yellow fever is just as governable by modern treatment as are any of the infectious and contagious diseases, and therefore, that there is no more necessity for a *cordon sanitaire* against its approach than against other equally serious diseases, I may say here what I propose, and desire to say on the subject of quarantine. Inland quarantine is certainly no more needed to protect a community from yellow fever than it is need-

ed against the invasion of small pox; and as the whole civilized medical fraternity is daily vindicating the truth of homœopathy in the application of its principles (vaccination) to the prevention and spread of a far more serious disease, small-pox, why not be "*regular*" by adopting a *similar* application on the samé principle in the homœopathic therapeutics of yellow fever, and demonstrate to the public by consequent inconsiderable per centum of loss *that there is no disease more entirely under the control of medical treatment than yellow fever?* That there is, therefore, no more reason for fear, in itself so conducive to the fatality of the disease; no more reason for the frequent advice even of the physician, *Sauve qui peut;* and no more reason for such quarantine than when the community was so fearfully invaded by small-pox in 1866–67, a disease which generally shows a loss of 37 per cent. in those unprotected from vaccination, and of even 7 per cent. of those under the influence of vaccination, and having scars, whereas, by the result of homœopathic treatment of yellow fever, the whole average loss in the city of Mobile since 1865 has been below 2 per cent.

I would favor marine quarantine and strict sanitary improvements and regulations, therefore, only as a wise protection against *all* infectious and contagious diseases; assured by these means of eradicating any naturalized germs, and preventing an epidemic of yellow fever; while, by proper treatment in any case the mortality may be reduced below the average loss as compared with other diseases, I would strenuously oppose inland quarantine, as unnecessarily destructive to the prosperity of any community, and as certainly no more called for against the dangers of yellow fever than against those of any other infectious or contagious disease.

"Dr. Drake fixed a limit to the fever at 400 feet in the United States; but it reached 460 feet at Fort Smith in 1823 in epidemic form, and has visited St. Louis, 475 feet; Louisville, 450 feet; Cincinnati, 550 feet, though not in epidemic form." This, however, was in times of slow transit, and wide distances between populations. Since 1853, and more especially in 1878, with a largely increased population, brought

in proximity by rapid travel and increased aggregations of causes generally, we find the yellow fever ignoring its former boundaries, and penetrating sections and elevations heretofore considered safe from its ravages; domiciling itself with all the privileges of nativity to wait the peculiar condition of the atmosphere, and surrounding factors to propagate its poison anew.

The whites have been considered much more liable to contract the disease, and in a decreased ratio as the race approaches the negro, who previous to 1853, with the natives, were, as a rule, exempted. In later years exemption has been purchased only at the expense of *isolation*, and natives now lose their acclimation, or exemption by absence, not only from the yellow fever zone, but from their immediate place of long residence for any length of time, as by change of residence from one city to another. I believe the negro, not a native to the yellow fever district, is just as liable as the whites to the disease. The large per cent. of blacks daily reported with the fever this season at Memphis, ranging from one-third to two-thirds of the whole, fully justifies my statement. The colored race has been more subject to the yellow fever in this country since 1865. The great change in their habits and manner of living, as freedmen, and their larger congregation in cities and living with so much less care and sanitary regulations than formerly, expose them more to the influence of the disease. Children, formerly exempted, have been in later years equal, and in some instances greater sufferers than adults—more than one-half of the mortality of 1878 in New Orleans, as reported to the Board of Health, constituting children under fifteen years of age. However, Louis tells us that at Gibralter in 1828, the disease spared neither sex, nor age, that men and women; young and old, were alike its subjects, and while he further states, that "those only were exempted from its influence, who had gone through with the disease in a former epidemic." Hastings, writing in relation to this latter point of the fever on the Gulf coast in 1817, 21 and 22, says: "if the patient remains in the region of the fever, he is very liable to a second or third attack; indeed if he is kept in the district of country where the fever

was contracted, he is more liable to a subsequent attack from the debility he is laboring under than he was originally." Again, writing in 1848, he states, that he had never seen a case recover after positive black vomit had been thrown from the stomach and adds, that he had no hope of recovery after its appearance, while Blair in 1837 makes the following statement. "Black vomit is no indication of gangrene or sphacelus; it is a curable symptom even now." Previous to 1853 recovery from black vomit was said to be rare in this section, Mobile and Pensacola—but since, recovery has been more common. Many cases of black vomit recovered in the epidemic of 1878. These differences, in the experience of [redacted] gentlemen who saw the disease in widely separated localities and in different years, concur with our own experience in establishing the fact of the mutability of the disease, but only in its intensity,—the disease *per se*, as described by all writers, when left to its natural course has always been the same. The history of epidemic Typhus presents as widely marked changes in succeeding visitations—in gravity varying from a per centum of 1 in 30 to 1 in 2–9, and likewise varying as regards age and sex in different epidemics. So we may write the same of Typhoid Fever or Small-pox.

No disease more correctly illustrates, by comparison, the correctness of the Homœopathic law, "*similia similibus curanter.*" Dr. Charles Belot, an Allopath, of Havana, observes: "The febrile orgasm is nothing more than the energetic reaction of nature to eliminate the poison, the effect of which, may be compared to those of the venom of the *crotalus horridus.*" This venom in *attenuated doses* is one of the most potent antidotes to the marked *symptoms* of the disease.

The Doctor again writes, "the only natural, and safe medical treatment is by that of the *symptoms.*" As epidemics offer special characteristics, and types, variable with each visitation, sometimes sthenic, at others asthenic, sometimes cerebral or gastro enteric; some continued, from the mild ephemeral to the most severe typhoid, or even low forms of typhus; others remittent, or, uniting these several characteristics in the same epidemic, varying as to individual cases, it argues more forcibly that the *symptoms* must be

the guide to a successful treatment, and as these symptoms vary in individuals, and with successive epidemics, especially as to the type the disease may assume, it follows reasonably that no routine formulary can be applied which will meet the varying indications from year to year as regards the disease, or as regards the character of change as to individuals, or if the Calomel and Quinine treatment, so general, is ever appropriate in any one epidemic or in any one case, it must follow as a consequence that as the symptoms change the treatment must be changed.

Yellow fever is only peculiar in its course and in its results, of one paroxysm, and so characteristic in its well-marked symptoms that it should be very rarely mistaken for any other disease in even its first stage. Extremely mild cases must be recognized by their history, and surroundings, and the danger anticipated before the temperature or urine gives us the pathognomonic diagnosis. The disease at times is very insidious; but as the introductory cases are almost invariably severe, and as the disease assumes the epidemic character all prevailing diseases don the yellow fever garb, it is not difficult to reach a prudent conclusion, if not a positive diagnosis, and a prudent anticipation is necessary to the life of your patient. The symptoms should guide you to the Homœopathic remedy, but if you nurse, or otherwise treat yellow fever as you would a case of bilious, typhoid, or typhus fever, you will soon turn it over to the undertaker, or at the very least, convert a mild attack into one of the most severe and dangerous character. Not infrequently it is most unexpectedly sudden in its attack, and as suddenly unexpected in its fatality. The late Dr. Richard Lee Fearn, of Mobile, informed me, that in 1853, he met a friend upon the street, who was on his way to his place of business without the slightest feeling of indisposition, but the Doctor perceiving otherwise, prevailed upon him to get into his buggy with a view of returning home and laying up a few days to ward off an attack, the epidemic being at that time very severe. He cheerfully consented, having but a mile to drive, and was carried into the doorway dead.

The late Dr. J. C. Nott related an instance of the same epidemic. Being called out to Spring Hill, seven miles distant, where the disease had never spread before, to attend upon several sick of the fever in his own family, before leaving, playfully picked up his youngest child, and walked out upon the porch, where the child threw up black vomit, and died soon after, not having indicated previously any signs of the disease.

In 1870 my attention was called to the algid type of the disease. Ushered in with only a general sick feeling, pulse at 40, perhaps a burning sensation with some pain at the stomach, and soon, vomiting of charcoal black vomit, (like charcoal masticated) or with violent, and profuse hemorrhage from the stomach with numerous particles of black vomit—all the indications of the collapse of the second stage, without any of the usual prodroma of the first or congestive stage of the disease. In the course of other types the patient would suddenly complain of coldness of the head, or of one foot, or one arm, and immediately indicate by pallor, a sigh, and long breath, the threatened collapse.

SYMPTOMS—First Period.

The premonitory symptom is usually a *headache*, which may continue several days, general lassitude setting in, and finally a chill announcing the unmistakable attack of the disease, or the chill followed by *severe headache, pains in the loins, and limbs, burning fever, dry skin and intense thirst;* or the general pains, without chill, with fever gradually supervening, and moisture soon following, indicating a mild invasion, which however may illustrate the old proverb of "March coming in like a lamb, and going out like a lion." The attack may present from the first, the cerebral form; first a chill, then intensely hot fever with profuse sweat, florid countenance, bright congested eye, dilated pupils, and injected conjunctiva, pulse 140 to 150, temperature 106 to 107° Fahr., and death following the third to the fourth day preceded by convulsions or coma. The gastric form of attack, usually less intense in the first period, will begin with languor, *headache, pain in the loins*, uneasiness in the stomach, a burning pain, nausea, and vomiting of the injesta, then

bile followed by fluid containing small dark particles, like coffee grounds in suspension, while the fever, not intense, but with considerable thirst, progresses to the second, third or fourth day, when remission may follow; the pulse and temperature approach normal, and if the vomiting has been stopped, the *burning* at the stomach less intense, with freedom from pain, and the *burning* moved down the bowels, the remission will be complete, and the *lethargic* condition of the bowels, characteristic of yellow fever in the first period, will give away to a stool of dark, gelatinous, and offensive character, especially, if aided by an enema of salt water. Your patient will declare himself comfortable. Again, these several features may be more or less united with only marked tendencies of favorable or unfavorable symptoms. The continued type with hemorrhagic symptoms, most usually announced by epistaxis—not a serious symptom in the first period, but may be fatal in the second and third) may present itself and close the first period with less of a remission. But let us recapitulate and bring forward the characteristic symptoms of the disease of this first period, which are more or less striking in every defined case of yellow fever.

Chill, violent fever, preceded, or immediately followed by *excruciating headache*, and *pains in the loins and limbs*; tongue clean, almost natural, or narrow, red on the sides, and dark in the centre, dry and parched, or else large, heavily coated, with bitter or bad taste in the mouth; dry, or moist skin, or sweat; great thirst and weakness; *photophobia, dilatation, suffused, watery and injected appearance of the eye, very bright*—pathognomonic of the disease; pulse strong, full and frequent; *Cadaveric* odor of the breath, a general odor peculiar to the disease, noticeable on entering the room; the bowels confined, or less frequently a diarrhœa of a dark character—if bilious more favorable, provided it does not continue to the second period. On the second & the third day, in serious cases, all these symptoms become aggravated—the gums dry, hemorrhagic, the countenance, dull —the patient sleeping profoundly or wakeful and restless; the skin of a citron color—the bright red of the eye penetrated by the yellow color, and the entire surface more or less jaundiced; the urine scant, mahogony color, and

holding *albumen*—pathognomonic in this period. With these conditions we have the disease of yellow fever fully developed, and the decomposition of the blood pointing to the specific character of the poison. Two to four days sufficient to exhaust nature by her severe energetic reaction to eliminate the poison from her invaded system. Like the noble ship, she has passed the first vortex of a fearful cyclone, and rests in the calm centre of *remission*, unexpecting and unsuspicious of the fearful last stage which awaits her, too often fatal from the slightest indiscretion on the part of patient, nurse, or physician just at this period. With this remission we reach the

Second Period.

As anticipated by the above remarks, the second period may or may not indicate the immediate damage of a mild or severe invasion. Following either, the patient may declare himself well, and ask for good allowance of food. But all the skill of the physician and watchful care over patient, *and nurse*, now demanded with even sleepless vigilance. Every unfavorable symptom must be anticipated if possible—the diet, and motionless quiet of the patient, the atmosphere of the room, the uncompromising denial to the removal of linen from the patient, or from the bed, to the very least degree disturbing, the entrance of unpleasant news, cold air, neglect of stimulant but for a moment; must all be watched and *cheerfully*, and *promptly* met, for the life of the sick hangs by a *thread;* yet he must not know that he is in danger. The pulse and temperature which should have been noted twice or thrice a day at this period pathognomonic of the disease. Having reached its acme, usually before or by the third day, the fever remits, and the pulse may gradually or rapidly approximate the normal—the temperature in concordance at this period—the first about 100, and the latter registering about 102° Fahr., then to 80 and 100° F, respectively. Convalescence may date from this registration, and only care and prudent nursing accomplish complete restoration to health; but generally the temperature rises again, while the pulse drops, and the third period must be met.

THIRD PERIOD.

If not before, in violent attacks, we certainly will meet those fearful symptoms, which, if our patient survives through the first invasion, and does not sink in the *remission*, now accompanies this pathognomonic change of pulse and temperature. With jaundice more marked, local and general hæmorrhages, black vomit, and suppression of urine —the countenance stoical, even fated, the pulse may fall to 30 and 25 pulsations; while the temperature reaches its fatal point 109–110° F. and a fraction, and the patient dies comatose or in convulsions. These periods are variably extended—the first as stated, and the third from one day to seven or more, when fatal, and when not, may be extended to several weeks in convalescence from very serious attacks. In less serious cases in two days from the time of remission, the temperature may reach its height of 102 to 104° F. and return slowly back to normal with the pulse, or the latter remaining somewhat depressed, may mark with *solemn beat* some abdominal difficulty, and continue so several weeks after the patient is about.

PROGNOSIS.

Favorable.—The following notes are drawn from personal observations, with such others from Drs. Belot's, Murphy's and Falligant's admirable monographs, as are mostly confirmed by my own experience.

"When the general symptoms are not serious, the disease will usually give away to convalescence before the seventh day. "When with jaundice, the urine is of the color of a decoction of rhubarb, and there is freedom from pain in the stomach, the disease will terminate favorably." When the fever continues three days without jaundice or epigastric pains, and there is no cerebral symptoms of danger, convalescence will date from the remission. Jaundice after the fifth day. Disappearance of albumen. Moderate moisture, moist tongue, free discharge from the bowels, not produced by a laxative; free discharge of urine, and a miliary eruption on the skin, are favorable symptoms. Acclimation, a previous attack, and freedom from fear will usually modify an attack.

Unfavorable.—Serious fear of the disease. Intemperate habit. Early appearance of heavy albuminous urine. Intense headache, dry skin, with vomiting, and jaundice in the first period. When with burning fever, profuse sweat and delirium, the disease continues unabated, it will prove fatal by the third day.

"When in the beginning there is vomiting, epigastric pain, with throbbing of the cœliac trunk, and jaundice appears, death is certain." "In sudden remission with vomiting, black vomit is sure to appear, and when with great exhaustion, and irregular pulse, death is imminent." "Sudden, severe pain during convalescence indicates gangrene, and will produce death within two days." Hiccough in the second or third period, or Metrorrhagia in the second period are very critical, in the third almost surely fatal. Difficult and painful breathing indicates death. The pupil immobile and insensible to light indicates cerebral effusion, and a fatal termination. "Photophobia prolonged into the second period indicates danger of sudden death." Suppression of urine with stupor. Temperature remaining long above 106°. At 109 to 110° F. treatment is considered useless. Below 90 F. extremely critical. Dr. E. A. Murphy, of New Orleans, calls attention to the recurrent pulse—he says: "While the fingers are feeling the radial artery, compress the vessel above, and if the beat is not felt, it is evidence of approaching death." Hunger in the third period. Dr. Faligant calls attention to purple lips as a fatal sign.

These indications, favorable or unfavorable, should be looked for with unremitting attention, and I have been particular in noting them here and drawing from the experience of other gentlemen, assured that if the character of the disease, with the close assimilation of medical agents appropriate to the detail symptoms were studied faithfully and applied promptly, fewer unfavorable symptoms would be seen. Of yellow fever, I may say, more than of any other disease, in serious cases, cholera not excepted, an error in treatment proves almost certainly irremediable.

CAUSE AND PREVENTION.

The decomposition of animal and vegetable substances, it is well known, gives rise to disease, and the greater the accumulation of filth, and neglect of sanitary measures, will there be, in proportion to the aggregation of human beings, morbific agencies produced, which develop special contagion. The factors, heat and moisture, with such subdivided chemical agencies as may be found in decayed and moist undergrowth or freshly upturned earth, acting conjointly, produce malarial disease, with its characteristic peculiarities of periodicity and many paroxysms. In our Southern cities we have such conditions developed more or less during the summer months, but more intensely towards fall, as our common intermittent and remittent and congestive fevers—never yellow fever. In certain localities these conditions, even with the same climate, are intensified where yellow fever, however, has never been known, and not only in this immediate section does this hold, but in great part, over a large space in the tropics, as upon the East coast of Africa and the East Indies; nor was it known in the lower Louisiana and Mississippi bottom lands until transplanted there by the French invaders, from the island of St. Domingo, in 1684, '99 and 1701.

But without extending this point beyond the limit proposed in this paper, I would simply state without fear of contradiction, that in no single instance can it be proven that the disease yellow fever has developed endemically, or ever had its origin, *de novo*, within the United States; that in no instance have we been given any evidence of its appearance within such limits at a time previous to its first importation, and consequently where it may have located and I believe did localize itself, and become a naturalized element of contagious effluvia, capable of propagating under the influence of peculiar chemical conditions of the atmosphere, of which we only know, and see, its own peculiar pathogenetic results, but have not analyzed its properties; neither those of the poison, nor the condition of the atmosphere necessary for the generation and propagation of its contagium.

We call this contagium the production of a germ, as we have not discovered anything to the contrary as yet, and

because it is most probably the correct theory; but as its effect, in the nature of the disease it develops, is not the same as that of the marsh miasm which gives rise to our common paludal, or true malarial poison, but presents a morbid condition *sui generis*—so peculiar, that in its *sum totum*, it is unlike any other known disease; therefore, let us not call it, what evidently it is not; a malarial fever, and hence not *caused* by the same composition constituting the miasma which develops a malarial disease.

Beyond the fact of importation or spontaneous development from localized organic material, we know no more of the specific cause of the disease than the first observer did two hundred years ago, but of its nature in its effects upon the human economy, we have learned much from which we are deriving annually, with the rapidly progressive science of the homœopathic Materia Medica—the application of remedies to the treatment of disease, more knowledge of the successful means of cure.

I affirm then, that the disease has its own special cause, which is essentially a distinct contagium, because of its distinct characteristics in the disease it produces, and unlike the product of other contagia, and that the nature of this special cause is as yet unknown only so far as its character is manifested in the development of specific symptoms, which in several particulars, and conjointly, differ from that of all other fevers—that its history, *ab initio*, and its history as relating to epidemics in this country, point strongly to the organic germ theory—that the first cause was not a production of this country, but an exotic, and in its transmission has become naturalized here, and under exciting causes common to tropical heat, of sufficient duration, these germs re-develope into more or less of their original power of infection; but of what this poison is composed is not known, any more than is known of the composition of miasm.

Further, I believe that while these germs may survive indefinitely in such surrounding conditions as may almost continuously prevail in New Orleans and Savannah—that as they have not survived a season in Mobile, and other localities, all our outbreaks of the disease having been due to fresh importation, that therefore, by due course to sanitary

reform, these germs may die for want of their proper element, or failing to do so, under hygienic precautions less favorable to their life and propagation, may become modified, and give rise under the influence of stronger miasmatic effluvia to fevers of a malarial character with a yellow fever type, as in bilious fevers with a typhoid type, but in proportion to the intensity of the organic life of the yellow fever germ will such other diseases give place, until, as instanced in the pure, and more virulent type of the imported yellow fever germ, all other morbid influences are suppressed or merged into the rapacious grasp and coloring of this singularly mysterious contagion.

In the history of the cause of the outbreak of Yellow Fever in Mobile, I have failed to find orally or otherwise, that the disease ever originated here, or as stated, that any development of the disease was ever due to localized germs. On the contrary, successive outbreaks have been either traced to importation, positively in the past 26 years, or the weight of evidence in obscure cases favoring such a view.

With the fact, however, that the disease was first introduced in this country through importation and that now it is a well recognized fact that these germs may survive a vigorous winter, and if one such season as in the case of the U.S. ship Plymouth, why not indefinitely?

That moreover, that the evidence that these germs once localized, do not live in some localities foreign to their place of nativity, just as the many imported vegetations, cannot now be denied; but on the contrary, from the evidence of experience, more evident successive years, we are warranted in saying, that in an atmosphere warm and moist, and if not continuously so, at least recurrent at intervals within a year and probably longer, and of two or more months duration, that they do live indefinitely, and are capable of generating no more mysteriously than the myriads of other living organic genera which are known to exist and propagate their kind, and as the scientist tells us, develop putrefaction in what is dead and disease in what is living.

If in this assumption I am correct, then why not yellow fever without fresh importation wherever it had previously been imported, and since developed once without fresh im-

portation, may it not be redeveloped as many times over, under the assumption of its indefinite life, with the same concurrent causes in play which once revived the dormant contagion of the germ?

If simply marsh miasma or the putrefaction of animal and vegetable matters caused yellow fever, then we should have the disease occur more or less frequently in every section where such conditions prevail, but while it is held by some that it is so produced in New Orleans and Savannah, we know it is not so produced in other malarial districts, and therefore the argument is stronger than a presumption, that the disease has become through importation naturalized in New Orleans and Savannah, and redeveloped by such exciting factors as we know will lend fuel to the propagation of the contagion, but which nevertheless, never generate the poison of yellow fever, as shown in the absence of the disease, as stated, in other like malarial localities under similar conditions of putrefaction, except through some remains of the originally imported germ, the *sine qua non* to the production and development of the specific yellow fever poison.

Hence I maintain that the disease is not indigenous to the United States, but that wherever the germs have been introduced they may and do become localized, and do give rise, subsequently to the disease in a pure or modified form under the like influence which propagates a freshly imported germ, and as this influence can be counteracted or prevented by the application of sanitary science, we can by the same means which will prevent the outbreak and spread of the localized germs, also prevent the outbreak and spread of the imported germ.

As a prevention we must stop the importation of the disease by a strict marine quarantine, conducted by thoroughly competent medical officers, and at the same time, starve out the naturalized germs by equally rigid and continuous sanitary measures, which should be supervised by a scientific board of civil and medical officers.

Predisposing Causes.—Continued hot weather unbroken by thunder storms. Great heat after prolonged rains. Excess in diet and intemperance during an epidemic; also irregular

habits, and exposure to night or early morning air. Fear. Unacclimation. Lowering of the vital forces from any cause. A slight traumatic fever has occasioned yellow fever, with death following in a few days.

Exciting Causes.—Exposure to the influence of certain localities. The atmosphere being peculiarly charged, and deficient in ozone. Pestilential exhalations from decaying vegetable and animal matter. Sanitary deficiency.

SEQULÆ.

Organic disease of the liver, kidneys, and development of latent disease of the lungs. Spontaneous recovery from phthisis, long continued jaundice, disease of the bowels.

INCUBATION.

Usually one to four days; sometimes ten to fourteen days.

PROPHYLAXIS.

Isolation. Acclimation by birth, or from a serious attack of the disease. Residence out of the infected district at night. Temperance in drink and diet. Regular habits. Freedom from fear. Bath every day. Carbo-veg. pure—a dose twice a day. Isolation alone being certain.

DISINFECTANT.

As a means of neutralizing the contagious effluvia of yellow fever, and preventing its propagation, our first agent is without doubt ozone, and if one part of it will disinfect three million parts of putrid air, it only remains for us to discover the first location of the contagium of the disease, and apply the ozonized remedy.

The generation of ozone in quantity sufficient for disinfecting a room or house, is within the means of the chemist; but while human life may be endangered by the too free disengagement of ozone, a sufficient quantity to protect health from the encroachment of the infection in the sick room, and not withal endanger life, is equally within the power of the chemist.

With the additional aid of charcoal in the apartments, with its quality of absorbing many times its own volume of

gases, one could have all the antiseptic agents necessary to neutralize the infection, and to prevent the spread of its poison, so far as science is capable of accomplishing this important point at the present day, and I think it feasible.

The most malignant cases of yellow fever, which I have attended, have been immediately due to exposure by sitting near an enclosed coffin, during the funeral services—in the last case black vomit following the exposure within twelve hours, and the pulse falling to 40, and collapse only prevented by frequent champagne stimulant. The packing of the corpse in charcoal would remedy the danger incurred by funerals, which are the chief means of contagion, and of spreading the disease most rapidly over a community.

Any putrid animal or vegetable matter covered by charcoal will be rendered inodorous, and the surrounding atmosphere freed from smell—a desideratum equally for the welfare of the sick as the healthy. It is a significant fact, to be noted, that our charcoal vendors, who carry on their business through our streets during an epidemic season, are not subjected to the influence of the poison of yellow fever; and in no instance have I ever known one to be infected, although they reside out of the city, and enter it at the most unfavorable hours of three and four o'clock in the morning, and are in most instances intemperate.

I have made use of Pixilic acid in my yellow fever sick room, and a free use of it about the house. In the few instances in which it was tested, there occurred but one case of yellow fever in either family—though in the last, there was in an adjoining room a case of intermittent fever, taken prior to the case of yellow fever, and though unacclimated, and also next door to a serious case, which died, the intermittent did not assume the yellow fever garb. The family after frost moved out, when a few days later, a young man passed the night there, (his only night in the city) and returned the following day to his home some distance in the country, where he died of yellow fever within the week—still a week later the house was occupied by a family of six who returned to the city after the first frost, three of whom were attacked by the fever seriously and one died. The pre-

vious household, whom I attended, numbered six, and the case mentioned took the disease from next door. There were also several other cases in the immediate neighborhood still remaining when the second family above mentioned entered the house. I am persuaded that the remaining five, and especially the case of intermittent of the first family, escaped infection by the disinfecting properties of the Pixilic acid.

The healthful and invigorating atmosphere of our Piney-woods is due to the properties of the Pinus-palustris, from which Pixine and Pixilic-acid are distilled. These agents destroy foul smell by chemical action, and not by the Carbolic-acid means of substituting a stronger, and hardly less unpleasant odor. They destroy insects, and are said to preserve meats.

It is very widely known that our Piney-woods, back country has been exempt from the spread of the yellow fever contagion; that while, as in the instance of the young man who contracted the disease as above mentioned, and returned to his family in the country, no other member of that family took the infection, so in numerous other instances, the disease ceases in the Piney-woods with the first imported case.

DIAGNOSIS.

Differential. In mild cases by its history, and surroundings, and more or less tendency to exhaustion, not common to ephemeral or mild continued fevers. Excruciating headache, and pains in the loins. *Photophobia—the peculiar appearance of the eye* (like the red-fish eye). *Cadaveric odor of the breath, and of the room. Albumen in the earlier stage of the disease. The discordance of the pulse and temperature.* Dengue assimilates yellow fever and may prevail late in the season, and upon the breaking out of yellow fever, but may be distinguished from it as also from bilious fever, by the early appearance of albumen, and the essential difference in the pulse and temperature.

TREATMENT.

General Directions.—Let the room be clean, and well aired. If possible, place only one patient in the same room. Have, immediately next to the patient, and upon the sheet covering the mattress, a thin water-proof, and over this, a sheet doubled several times, which can be removed, and returned without disturbing the sick. *Never move a yellow fever patient.* Keep his head quietly and comfortably upon the pillow. If vomiting, aid him to turn his face over to the vessel—never to raise up. If a night-glass is unpleasant, use suitable cloths, and remove the excreta at once from the room—burn it. Keep the room of an even temperature. A fire must guard against changes of the weather. The effect of sudden north winds, and storms [illegible] bad. Have beef tea (the Valentine or Richmond Extract)—not soup—always warm, and champagne or brandy—both in the room ready on a moment's call. Let the patient's covering be a sheet and light blanket, not less, but more if needed.

Notice the first symptom of suspicion—the headache or any slight indisposition. A cup of hot orange leaf tea, if not to be had, then black tea with milk, after getting to bed, and while being given a hot mustard foot bath, will check the force of the attack, or break up a light invasion of the disease, by moderating the chill and fever, head and nervous symptoms. Make everything cheerful for your patient. *Never permit him to be left alone*—if he turns over, readjust the covering over him and smooth down his pillow. Anticipate his every want, and *watch his nurse*, and the carrying out of your directions with scrupulous attention. Do not consider these room instructions in any particular superfluous—the slightest indiscretion, not only may, but almost assuredly will, cost the life of a yellow fever patient. I have known a very small piece of nicely toasted bread given out of time to produce death in a few hours; likewise getting out of bed or sleeping uncovered. One of the only two yellow fever patients I ever lost, met his death, after being convalescent, from one of the most severe attacks of the disease, by the heartless refusal of his nurse to supply him with food and

stimulant, in accordance with my order, and repeated the evening previous, upon his waking in the morning after a long and salutary night's rest. I entered the room *at 6 A. M.*, upon an *inspection visit*, in time to witness the painful scene, and only had to cross the room for the nourishment, but reached my patient as he looked up longingly and fainted—never to breathe again.

First Period.—A review of the symptoms in the outbreak of the disease in any of the congestive types, will place Aconite, first, or tincture, and Belladonna, first to sixth, with wonderful fitness at our disposal. They cover the chill, burning fever, intense thirst, delirium, red face, congested eyes, photophobia, dilatation, headache and general pains, restlessness, anxiety and fear of death, pressure in the stomach, nausea and vomiting. Tongue red, dry, redness of the edges, whitish coating; disposition to get out of bed—a common symptom in the disease—bitter and bad taste. While these remedies respond to the congestive stage, they may demand our attention more or less in the continued and gastric types, and bilious form of the disease throughout the case. Bryonia and Gelseminum rank next as febrifuges. The first will be indicated in the more bilious symptoms, the severe general pains—*worse on motion*, intense heat, sweat, irritability, nose-bleed, retching, burning in the stomach, lips dry and cracked, tongue dry and yellow coated, and bowels confined. Aconite and Belladonna mostly cover these symptoms, yet, if we are not moderating the violence of the invasion, and guarding against the localization of the disease; if the temperature is not being reduced, the *photophobia* relieved, or the pains and burning in the stomach moderated, and vomiting stopped, or the urine free, it will necessitate a close comparison of these and other remedies with the symptoms, and a quick and intelligent choice.

A cold wet compress to the head—sponging the patient with a mixture of hot water and vinegar under the covering, and if there is nausea or vomiting, a cold wet compress applied over the stomach and across the throat, will prove grateful and efficient auxiliaries, and should not be neglected. The compresses should be re-applied cold and wet often, and

always with a dry towel over them. The hot foot bath may be used occasionally if the skin remains dry, or the head symptoms predominate, or the patient is nervous and sleepless. Relieve the thirst with a little cold water, or more frequently with crushed ice, warm or cold orange leaf tea, or orange flower water sweetened—these drinks quiet nervousness and assist sleep. A hot mustard foot bath, and a cup of orange leaf tea will put your patient to sleep when other means have failed.

Colchicum, and Sticta, tinct., are excellent intercurrent remedies for the severe pains; the latter also for sleeplessness and nervousness. Rhus 1, also good, but Arsenicum 2, may better cover the totality of symptoms, and especially meet the restlessness, anxiety, desire to move about the bed, or get up (Arsenic 30), burning with pain in the stomach; pulse irregular, quick, or weak and frequent; the eyes red, excessive photophobia, jaundice, scanty urine, bitter taste and unquenchable thirst, dark or blackish diarrhœa. Arsenic is a faithful anchor, and may be strongly indicated from the first to the last. Arsenic 3–6, and Veratrum 1, have conducted every case of black vomit safely to convalescence for me thus far. But this fact should not tie us to these valuable remedies; specific indications may call for other drugs yet to be considered in the second and third periods of the disease. We mention these here because we may have them indicated in the first period for obstinate vomiting or even black vomit. Procure a free moisture and keep your patient in it to the last—don't sweat him to death. Aconite, tinct., if not contra indicated, will usually keep up a soft and pleasant condition of the skin.

Consult Gelseminum for fever with moisture, violent pains, heaviness and prostration, drooping eyelids, dilatation and vertigo—more suitable than Aconite in the remittent character of all diseases, and for fever without thirst. For sleeplessness, nervousness, the painful and obstinate pervigilium, we must have recourse to Belladonna 6-12, Hyoscyamus 1, Coffea 3, Platina 30, which used intercurrently will usually be sufficient, not forgetting the hot mustard foot bath. Watch the strength of your patient,

and support him with Beef tea (Extract), Champagne or Brandy as may be needed. In the first stage, with high fever and cerebral congestion, very little or no nourishment will be needed, especially if the stage is short. If the patient is attacked immediately after a meal, the food must be gotten rid of—a little warm salt water or mild laxative, will accomplish this—but this will be rarely needed, as the *load* will be almost certainly vomited. Otherwise I have never administered a laxative, and for this purpose only twice—never an emetic, nor a dose of quinine have I ever given in the treatment of yellow fever.

More than half of the victory is to be won in the first period, and much depends upon the first prescription and management from the start. The moment the fever moderates, watch the pulse and temperature closely, and make sure you are by the side of your patient when he fully reaches the period of *remission*, if that is possible, and if not, instruct the nurse minutely what to do in your absence.

Second Period.—This is simply the period of *remission*, after the more acute form has subsided—the more sudden and complete the remission, the more danger there is; consequently, great caution should be exercised in the management of the first period in moderating the fever and supporting the patient. Aim, therefore, to equipoise the circulation, and as the fever declines, and with it the strength of the patient, supply food or stimulant prudently, that when the remission is reached, there will be less exhaustion; and with all, if your remedies have protected every organ from the morbid effect of the poison, which has been surging through the circulation, and threatening local inflammations to the permanent destruction of vital tissues, then you have proved your science all that it should claim to be—an auxiliary to nature—and yourself master of the situation. The pulse then, and the temperature will not widely diverge, and the danger be greatly lessened or entirely avoided. But if the violence of the attack, or imprudence, or ignorance, has left the patient to the mercy of the venom, just in its proportion will this remission find the patient exhausted, and in danger. Just at this stage, if not

before, Arsenicum best be used alternately with Lachesis 6, Veratrum 1, Ipecac 2, or Belladonna, as may be particularly indicated by the symptoms. Consult also, Camphora, China, and Carbo-veg.

Third Period.—The circulation has been the unwilling conductor of the poison, and while the tissues may yet have remained sound, the blood may have become altered. Where we have had the vomiting of bile, or its mixture with the secretions of the stomach and with mucous follicles, we will now have the coffee ground, or charcoal vomit, or worse, the dark or black decomposed blood.

It is in the second and third periods, the old school meet their heavy percentage of loss. Dr. Belot says 20 to 30 per cent. in the second period, and 75 per cent. in the third. Fortunately, with such remedies as Aconite, Belladonna, Gelseminum, and Bryonia in the first stage, we have the advantage over the second and third not afforded by the irritating, nauseating and purgative 15 to 20 grains of Calomel, and a like dose of brain and heart excitant—20 grains of Quinine, which helps the disease in the first instance by dragging down nature to its mercy, exciting the heart's action in the second instance, and aiding the poison in its surging race of localization and disintegration of the blood and tissues, so that when the second or more important and third period is reached, the poor afflicted patient is ready to die of exhaustion suddenly, or linger a few hours or days through fearful hemorrhages, delirium, convulsions, coma, and black vomit, common to this fever when left to Nature alone, and incalculably worse when the chief gentlemen of the faculty, *with years of experience under the Allopathic treatment, and 75 per cent. of loss in the third period, will venture upon packing their patients in ice to freeze out*—not the poison surely—*but the little life left.*

To meet the danger of exhaustion, we must be ready with Beef Tea and Champagne, and sustain the flagging efforts of nature. Cheer your patient by look and action—not pointedly, but naturally. *Watch your nurse*—instruct her minutely. Food must be given with stimulants alternately, at intervals, as the exigency of the case demands, and one

or two tablespoonfuls of Champagne, or Brandy properly diluted, immediately after each spell of vomiting. For these two symptoms, exhaustion and vomiting, with the above support, there are no better remedies than Arsenicum 3-6 and Veratrum alb. 1, alternately, every hour, and food or stimulant in this half hour's interval. The cold wet compresses over throat and stomach must not be forgotten, and after the first period, a towel wrung out in hot mustard water may be substituted over the stomach, or an allspice bag steeped in common Brandy or Whiskey.

In more serious complications with local or general hæmorrhages, dry, parched red or dark tongue, foul breath, burning in the stomach, jaundice, fetid diarrhœa, Crotalus 3d trit. is called for, to be given alternately with Arsenic. Then you have also, Sulphuric Acid tr-2 and Argent nit. for particular conditions. Sulphuric Acid indicated for hæmorrhages of black blood, metrorrhagia—profuse sweat with exhaustion—fetid stools, and diminished secretion of urine. Argentum, nit. covers more especially the vomiting. In fact Arsenic meets the symptoms of both almost entirely, and covers better the burning in the stomach and abdomen, *severe heat, and burning* in the *præcordial region*, dyspnœa, the restlessness and the moral symptoms generally, and certainly the decomposition of the blood. For the delirium, convulsions, coma and nervous symptoms Belladona 1-6, Hyoscyamus 1-3, Stramonium 1-3, must be consulted and may be administered alternately with Arsenicum, or in the case of suppression of the urine, Cannabis Ind., which covers also important head symptoms, especially if produced by the uræmic condition of the blood, stupor, coma, or convulsions. If without hæmorrhages and the severe complications mentioned as indicating Arsenic and Crotalus, you have the cerebral form, with renal complications, then either Belladonna or Stramonium might be alternated with Cannabis. Lachesis is an important remedy in yellow fever, and may be indicated in either of the periods. It has the chill, and dry heat, worse at night, nervousness, hæmorrhages from different organs, yellow color of the skin, miliary eruption, prostration, and like Arsenic, the feeble and quick, intermittent pulse; head-

ache and moral symptoms. In the typhoid type, Lachesis, Belladonna, Rhus, Arsenic, and Hyoscyamus have great influence over their own characteristic indications.

In the Algid type Arsenic, Carbo, veg. and Camphora, or Veratrum will be indicated.

After the remission stage, the pulse fallen to 90 and temperature risen to 101° F., the case may follow the continued type with a typhoid tongue, slight irritation of the stomach, and relax condition of the bowels—here you may continue the Aconite or Belladonna with Rhus; or if the bowels are confined, with Bryonia 1, and give an enema.

The case may present all the symptoms of gastric fever, when Ipecac 3, Aconite, Nux Vomica 2, and remedies of this class may be called for.

Other remedies not yet mentioned may be indicated, for like our rich materia medica, the disease has a wide range of symptoms.

For hæmorrhages, in addition to the remedies named, Hamamelis tr, Millefolium tr-1, and Trillium 1st trit, are special and efficient agents.

For renal complications, albuminuria and suppression, Cantharides 3-6, Apis-mel 2-1, Gallic acid 1, and Terebinth 2.

For brain complications, stupor, coma, delirium, or convulsions, Opium 3, Hyoscyamus 2, Belladonna 1-6, Stramonium 2, Coffea 3, Gelseminum tr-1st, and Cannabis Ind. tinct.

For debility, exhaustion, and sinking, Carbo veg. 2d trit., Camphora 1, and China, (Champagne or Brandy.)

For the nervousness, restlessness—painful pervigilium, Belladonna 6-30, Hyoscyamus 2, Coffea 3, Sticta tr, and hot mustard foot bath.

The diet should be moderate, and simple throughout convalescence, during which Claret is an excellent help. Any imprudence in dress, exercise, or exposure of any kind, is quick in bringing on a relapse and fatal results.

MORTALITY.

Not until the close of the epidemic of 1878 has the Homœopathic profession had the opportunity of proving their claim before a general public to the greater advantages, and

greatly more successful results of their treatment of yellow fever.

From the practice of individual physicians, as shown on the City Sexton's Register for 1867, 1870 and 1873, and since on the Register of the Boards of Health, especially of Mobile and New Orleans, there is (immediately under the exclusive supervision of the Allopathic school) proof, incontrovertible, from the enormous difference in the relative mortality of the two systems of treatment, which renders no further argument necessary to convince any unbiased inquirer of the superiority of the homœopathic system of therapeutics over all other medical systems tested since the first outbreak of the disease to the present, and with no other disease is our therapeutics more severely tested or our comparative success to that of the old school more undeniably established.

In 1867 the number of cases were large, and the general mortality under the usual average. The disease was comparatively mild, though there were very many serious cases to contend with, chiefly of a gastric, and continued type; resembling more the character of our bilious fever. I had no means of ascertaining the mortality of the old school—though I know that no physician of that system of practice escaped loss, while the late Dr. Geo. Lingen, and myself, *did not lose a single patient*, nor was there a death from any disease in my practice from July to January. The City Registry shows the number of deaths to each physician, but as only the deaths were reported there are no means of reaching the per centum of mortality.

In 1870 I contended with one of the most serious epidemics which ever visited Mobile, and of a character as subtle and virulent as presented itself through the South-west in 1878. The disease broke out about the middle of August and lasted, as an epidemic, until a heavy frost on the 21st of November, though cases continued occurring through December. Without assistance or consultation, I passed through this very trying epidemic, seeing all my cases through their convalescence; treating black vomit, hemorrhages, brain and threatened kidney complications, phthisical and intem-

perate conditions of the system, *without the loss of a single case;* neither was there a death from any cause registered against me from July to January. Five of our city physicians fell at their post of duty. As in 1867, the records of deaths alone were reported—but the large mortality was unmistakable—not less than 30 per cent. Notwithstanding the frequency and large number of black vomit cases common during this epidemic, I did not have any occur in my practice where I had the management from the second day, except in the fearful attack of threatened collapse, and pure black vomit which prostrated one case within twelve hours after her attendanee upon the funeral of a friend whose obsequies were delayed, and the body, in consequence, had become very offensive. Many left the scene nauseated—my patient among the number, and within two hours after, about 5 P. M., retired to bed. I saw her the next morning. She was throwing up the charcoal black vomit. Her pulse was at 60, and soon dropped to 40. Her complexion was tan colored, and tongue black and dry; the surface cool, with burning at the stomach. She took Veratrum, album, first potency, 1 to a hundred ($\frac{1}{100}$) alternately with Arsenicum, third, of one to a hundred, at intervals of one hour, and a tablespoonful of champagne after each vomiting. She made a good recovery in ten days. Severe similar cases are not uncommon, and they test the truth of the principle upon which homœopathy is based as well as the sufficiency of small doses.

In 1873 the fever was imported from New Orleans into the south eastern portion of the city, about the middle of August, but did not spread beyond a very few cases, and the infection ceased. On the 10th of September Edward Dixon came into the city sick, from Shreveport, and on the 11th was taken to the City Hospital, in the north-western part of the city, where he died on the 13th of a malignant type of yellow fever. This point was the focus of infection. A full record was not taken of the number of cases, and such as were reported by the City Medical Officer fell far short of the correct number. I placed it at very little, if any, under 200, and the allopathic mortality, as usual, over 30 per cent.

The reports offered a total of 40 cases and 19 deaths or 47.5 per cent.,

Of 4 cases in the Providence Infirmary, 3 died. Mortality of 75 per ct.
Of 7 cases in the Marine Hospital, 1 died. Mortality of 14.2 per ct.
Of 7 cases in the City Hospital, 3 died. Mortality of 42.8 per ct.
Total, 18 cases and 7 deaths. Mortality of 38.8 per ct.

The case of Sister Xavier, of the City Hospital, is not included in the above record, though forced in the report referred to by two gentlemen of the old school *who did not see her*, though her case was officially reported to the city authorities by an old school physician of acknowledged experience, as positively not a case of yellow fever, and likewise by two homœopathic physicians, the consulting and attending physician; and I take occasion here to reaffirm my statement made at the time, that the Sister did not have a single symptom indicative of yellow fever, either before or after death, and that the case was positively not one of yellow fever, nor had she been immediately exposed to it.

In this same report, we have presented as evidence against the use of carbolic acid disinfectant the following statement as given by the Boards of Health of Mobile and New Orleans:

"In New Orleans, in 1873, the mortality was 58 per centum of the cases.

"In Mobile, in 1873, the mortality was 47½ per centum of the cases.

"*No such tremendous mortality was ever heard of before, even in the most malignant epidemics.*" The italics are mine.

From the "Proceedings of the Louisiana State Medical Association, at its second meeting, held in the City of New Orleans, April 9th, 10th and 11th, 1879," we have the statistical table of mortality of yellow fever in the Charity Hospital of New Orleans during a period of 52 years, given by that searching and accurate scholar and gentleman, Dr. Joseph Jones, of New Orleans—all allopathic authority. Let us see how it bears out the statement, "no such tremendous mortality was ever heard of before, even in the most malignant epidemics."

By this table we have the mortality in light visitations showing a loss of 100 per cent., and in very many ranging from 50 to 78 per cent. I only give a portion of the report:

YEAR.	ADMISSIONS.	DISCHARGED.	DEATHS.	PER CENT.
1822	337	98	239	70.92
1824	167	59	108	64.67
1825	99	40	59	59.45
1832	26	8	18	69.23
1836	6	1	5	83.33
1838	24	5	19	77.25
1840	3	—	3	100.
1841	1114	520	594	53.14
1846	146	50	96	65.82
1849	1055	510	545	51.66
1852	496	157	339	68.74
1853	3217	1327	1890	58.71
1857	235	80	115	65.91
1859	107	23	84	78.50
1867	1493	821	672	45.01
1870	518	256	262	50.57
1872	11	3	8	72.72
1873	118	43	75	63.55
1874	9	3	6	66.66
1875	16	5	11	68.75
1878	817	406	411	50.44

Then follows the total average record of 50 years, showing an average mortality of 48.55 per cent., *or nearly one-half of the whole number of cases admitted for treatment.*

Carbolic acid was not used before 1871. Carbolic acid, then, cannot properly offer any excuse for the *tremendous mortality never heard of before* 1873 in Mobile and New Orleans.

It was in this year, 1873, that I met my only loss, if either of the two cases can be called my loss. However, I shouldered them in my detailed report of cases to the Homœopathic Yellow Fever Commission. The first was a child two years of age, taken some two weeks after frost. On the 14th of October the mother denied repeatedly and positively to me that any of her family had been exposed to the fever. Her children had the fever seriously in 1870.

On the 28th, at 5 P. M., I was sent for, and found the child in a convulsion and vomiting and purging the same black

matter—black vomit. I only arrested the convulsions—the child died that same evening, and was laid out as yellow as gold. The mother acknowledged then that "this child and an elder brother, aged twelve, had been in the sick room of a relative more than a week before. No warning and instructions could have been more precise, plain and positive than I gave to this woman, for her conduct seemed hardly to emanate from a sane mind, and subsequently proved so brutal in positive treatment and neglect, that after I had, under the greatest disadvantage, carried this boy of 12 years through one of the most terrible attacks I ever saw—not seeing him until 24 hours after he complained to his mother, and after his partial loss of mind—then immediately to contend with hemorrhages and black vomit. But the first period was passed—the remission safely over, and the third period met, notwithstanding positive brutal nursing, of which I was witness. Nourishment refused and the baton held ready in hand, with threats, if my poor, delirious patient did not "shut his mouth, or dared to get out of bed." The end of medication was safely reached by an average attention of four visits a day, from 6 A.M. to 11 P.M. and on the evening of the 12th I called to warn the unnatural mother to give beef tea and brandy whenever he awoke—that he would probably sleep quietly most of the night. He awoke at 5 A. M., called for nourishment—it was refused. He slept a half hour again, and awoke and appealed for nourishment as I entered the room, fainted and died before I could administer the brandy—five minutes earlier and I should have saved his life. She had been repeatedly warned that such would be the end if he was not supported promptly by nourishment.

These have been my only losses through four epidemics—though the last found me absent from the city on account of ill health, and I returned too late (in 1878) to see more than three cases, which recovered.

The disease, as it appeared in Mobile in 1878, met with very little atmospheric encouragement, and had it not been for a prevailing malarial fever, due to the same cause which would excite the propagation of yellow fever germs, confined

to the northern section of the city, where the yellow fever epidemics have rarely taken such general hold as in other portions, I believe the imported cases would not have spread the poison beyond the limits of the first household, and certainly not had isolation been enforced. I am justified in assuming this opinion from the fact that one of the first imported cases did appear in an opposite section, where the malarial element did not prevail, and where yellow fever always pervades when epidemic, and that this case did not spread the disease; nor did this section become infected. Further, it required, or at least had, several foci in the malarial section from separate distinct importations before the poison spread with any force—showing the virulence of the disease to have been arrested by transmission to a healthier atmosphere, for it was severe from whence it came (New Orleans), though finally proved fatal here to 7 out of the first 8—87.5 per cent—and to 5 out of the first 21—76.2 per cent; gradually decreasing in per centum of loss to the average calomel and quinine result of 27.9 per cent. out of 291 cases up to the time I last examined the record; after which there were only a few cases. Of eighteen physicians, one lost 8 per cent., a second 10 per cent., while no other reported a loss under 25 per cent., and the range registered from 8 to 100 per cent., with the average mortality, as stated, of 27.9 per cent.

In 1878, in New Orleans, of the cases reported by the faculty, there was shown a loss of 17.2 per cent. The Homœopaths, in the same epidemic, reported to the commission—*a mortality of* 5.6 *per cent.* In the same city, of the 4,056 fatal cases of yellow fever reported to the Board of Health, 2,344 of them (more than one-half) were children of fifteen years and under—*a loss of* 57 *per cent.* In the same city and same epidemic, the homœopaths reported 1,089 children of fifteen years and under—with 48 deaths— *a mortality of* 4.4 *per cent.*

Now, notwithstanding the malarial element introduced in the disease, so much so that some physicians insisted it was all malarial and not yellow fever, the calomel and quinine treatment failed—for 27 per cent. loss is a failure, and it will so fail in every instance where there is the slightest

tincture of yellow fever poison. Last year's experience made this very positive in the pronounced opinion of some very high in allopathic ranks, and it only requires a fair study of the subject for the entire profession to reach one of the important points in Dr. Choppin's open letter, "*the mortality is too large.*" Now compare the mortality in the same school of those who have reduced their loss 75 per cent. by discarding the use of calomel and quinine—then go a little further, with prejudice thrown aside, and fairly compare even the loss of the latter class with the homœopathic loss, and we find that in different localities, and different epidemics, notwithstanding all the variations of the disease, under the guidance of the same law and system of individualizing, they have reached the same results, with even a general average of mortality below the lowest per cent. of loss of any individual Allopath.

The example of Paul's blind prejudice, wholly due to *ancient dogmas*, is before the world—and now, that leading representative men have at last awakened to the inefficiency of their treatment, and not only acknowledge their ignorance of any known remedy to cure this disease, but blindly propose experimenting, it is time that we, who have already cast aside all false prejudice, should point these gentlemen to a system of medical treatment, the results of which prove the correctness of its principle—or at the very least, by a greatly diminished mortality, invites an honest examination; yet we unhesitatingly avow, that while thousands among the most enlightened are numbered among the homœopathic believers, and nearly a dozen of the best appointed medical colleges teach its doctrines in the United States, and while its advocates are rapidly equaling the number in the old school, and humanity cries out from the sick and dying, "Don't experiment, Doctor," it is not possible to read the letter of the frank and honored President of the New Orleans Board of Health, Dr. Choppin, and weigh over carefully this extract: "We know of no remedy to check the disease, at least, I know of none. The mortality is too great, therefore, I make the suggestion that physicians be advised to experiment to see if we cannot discover some remedy to check the disease," (Dr. Chop-

pin, in New Orleans Times, August 30th, 1870), without sincere professional sympathy, though with professional mortification—sympathy for the living and the dying—sympathy for the physician who, while his mortality appalls him, advises experimenting upon the helpless sick and suffering, rather than examine his neighbor's more successful system of therapeutics in the face of the blind prejudices and pharasaic ostracism practiced by the faculty, when at that very time there was being registered upon his own records, under his own supervision, a contrasted result in the mortality of the two schools in children alone (the most difficult subjects to treat) under fifteen years of age, *of 57 per cent. of loss by the allopathic treatment vs. 4.4 per cent. of loss by the homœopathic treatment.*

Such results, with the rapid increase of advocates of the system are tests of merit, and should commend the study and honest examination of the practice to every conscientious physician.

A century has nearly elapsed since the principles of homœopathic practice were boldly announced by a truly gifted scientist, and in that time thousands of the ablest medical minds have turned aside from the irrational system of treating disease, which so provokes the suggestion to experiment—a majority of whom are graduates from the first Allopathic colleges, or of Homœopathic colleges, as well appointed in every branch of medical curriculum; yet seventy-five per cent. more rigid in their academical and professional requirements. These gentlemen stand the peer, socially, mentally, and professionally with the practitioners of the old school. If these facts cannot commend the system, overcome sneers and partisan legislation, and unstrap the shoulders of false dignity, this letter of Dr. Choppin's, which only utters the experience of his school at large, ought to humiliate the reflecting class, and give place to humane inquiry before further *experiment* is made upon the helpless patient.

I would ask, whether the mortality in the treatment of yellow fever has been reduced by the employment of calomel and quinine at any time within seventy-five or one hundred years, or within the experience of the profession, be-

low the average loss in the epidemics of the past ten years? Can the advocates of these drugs claim *any* progress towards a more successful result in the treatment of this disease? Does Dr. Joseph Jones' mortality table, taken from the records of the Charity Hospital of New Orleans for the past fifty-two years, present any encouragement for the further continuance of these same long and faithfully tried remedies? Does the late mortality in the Providence Infirmary and City Hospital of Mobile, or the general average of the physicians of the city of 27.9 per cent. present any improvement in the treatment of yellow fever now as compared with the mortality previous to 1847, given us by Blair in British Guiana of children under fifteen years, 24.39 per cent. and of adults from 22 to 28.45 per cent.? Or is it possible for any candid inquirer to follow the clinical observations of Louis at the bedside of English soldiers at Gibralter in 1828, and not even at this late day feel a professional mortification that neither by Louis, nor his present allopathic readers generally, has the painful and fatal results following immediately upon the administration of calomel (three grains every three hours, or five to ten grains to be repeated) in the four cases presented, been any lesson of experience in relation to its use in this disease? From a mild form of attack without a single symptom of alarm there follows restlessness, then nausea and vomiting, tenesmus, the yellow cast, anxiety, with burning in the epigastrium and exhaustion—all the plain clinical symptoms of the drug too evidently dragging the poor patient down to the mercy of the yellow fever poison, and yet so little is known of the capable effects of calomel as not to be recognized except by a few less prejudiced observers, one of whom, Dr. W. L. Coleman, has given us through the Howard Medical Association of Memphis, his experience, and his improvement in the treatment of yellow fever without calomel or quinine in the epidemic of 1878. Short extracts from the Doctor's admirable paper shall present his own statement; and his mortality, compared with that by the use of calomel and quinine, proves the wisdom of his choice. "And with all due respect to the gentlemen who differ from me, experience compels me to say, *we need no calomel or quinine*, * * *they only add to the en-*

emy's forces. [The italics are mine.] * * Out of one hundred and fifteen cases treated by myself alone and not seen by any other physician, I have lost nine (7.8 per cent.) and in several of those I attributed a fatal result to a neglect to obey my instructions. * * * I have been called upon to treat quite a number of cases seen or previously treated by other physicians, three of whom died. One had calomel and chloroform contrary to my orders; the other two had twenty grains of quinine at the commencement of the fever, and I do here solemnly assert that in an experience of over twenty years in the treatment of yellow fever *I have never seen one single case benefitted by a dose of quinine.* [The italics are mine.] On the contrary, I have seen evil results from its administration, which I could easily show to any man of an unbiassed or unprejudiced mind. * * * Entering upon the study of medicine in the midst of one of the most fearful epidemics that ever devastated our loved country, that of 1853, my whole attention was directed to this disease, and I resolved to make it the study of my life, but after twenty-five years of study I am forced to-night to make the humiliating confession that I am as powerless to arrest, to abate, or to cure it as I was at the commencement. While quinine is my favorite remedy in the treatment of all the diseases of the South, and sheet-anchor in many, yet I have been compelled by sad experience to abandon it in yellow fever, from having seen so many evil effects follow its administration, and if some of the gentlemen here who have used it so freely in this epidemic (1878) will take the time and trouble to go over their ground and visit the families they have treated, if any of them are left, I very much fear they will hear bitter complaints on account of its having been used. * * * Twenty years ago, if I had given Fowler's Solution of *Arsenic* (three drops in watermelon seed tea every two or three hours) *to seventy-five patients without losing one*, [the italics are mine] as I have done here, I would have been enthusiastic in its praise." A remarkable confession made in contrast with that above, that he was as powerless to cure the disease after twenty-five years of study now, as he was at the commencement, notwithstanding such

a result (homœopathically) with Arsenic, as the treatment of *seventy-five patients without losing one.*

Here we have the verdict of a gentleman of experience (allopathic) who has thrown prejudice aside, and seen his way out of the old rut of routine medication, which was too evidently unsatisfactory to him, and it is only too amazing that it is not so to every professional mind, if for no other reason than that the fact presents itself, that in almost a century of trial, there is no reduction in the mortality of the disease; yet further than this, the plain ocular evidence demonstrated by the effect of the medicine in the serious aggravation of symptoms or disclosure of new ones, which follow immediately upon their administration, and which belong more to the drugs than to the nature of the disease.

Neither calomel, nor quinine has in its whole toxical effects any similarity to that of the yellow fever poison, or is there any sympathy existing between these drugs and the disease; consequently nature attacked by a fresh opposing force, and turning to defend herself from the *repeated* blows (doses) of her new enemy, is left to the mercy, and almost sure conquest of her first antagonist. Whereas, Arsenic having a drug action, similar to the poisonous action of the disease, acts as an antidote to that poison and in sympathy with nature's efforts, and consequently nature is *reinforced* in place of being *depleted;* hence Dr. Coleman's successful and happy experience with this drug in *not losing a single case out of seventy-five.* Doctor! that is homœopathic treatment, and we will not quarrel about the dose either.

In 1878, Arsenic, as in other epidemics of yellow fever, proved an anchor to windward in the first stage or second, and the almost invariable sheet-anchor, the seaman's last refuge, in the third stage. The experience of Dr. Belot, of Havana, another allopath, is very strongly in favor of Arsenic towards the end of the second period. He says, "When the vomiting cannot be arrested, when the patient has continued nausea, when the vomit contains bile or mucosities filled with blackish or sanguinolent streaks, in a word, when the characteristic signs of pronounced yellow fever are developed, there is no better remedy than Arsenic. It is given as arsenious-acid dissolved in water, and prepared in the

following manner: Boil for an hour a grain of arsenious acid in a porcelain cup, containing half a pint of distilled water; then replace the evaporated liquid with an equal volume of boiling water, let it cool, and give this solution by the teaspoonful every half hour, until the nausea and vomiting cease. * * * Prescribed under fitting circumstances, arsenic often brings unhoped-for amelioration. * * There are some medicines, whose action, though certain, is inexplicable. Such is arsenic, the influence of which must be accepted as a fact, without considering theories more or less satisfactory." This is good homœopathic treatment also, nor shall we object to the mode of preparation or the dose, and we shall only add in answer to the Doctor's inexplicable action of the medicine, that the law of "like cures like," fully explains the influence of the arsenic in the given case of symptoms presented in the second period. And just as atropine is the antidote to morphine poison because the two poisons are similar in their action, so are arsenic, lachesis, and crotalus, presenting in their respective action symptoms and lesions similar to those of the yellow fever poison, its best antidote.

In the records of the yellow fever of 1878 in Chattanooga, where it was extremely malignant, the homœopaths treated 99 whites with a mortality of 36.4 per cent.; whilst the allopaths treated 158 whites with a mortality of 51.2 per cent.

A small homœopathic hospital at Chattanooga treated 18 of the poorer class with a mortality of 16.10 per cent., whilst a similar hospital at Louisville, Ky., under allopathic care (Dr. E. O. Broun) treated 89 cases of the fever with a mortality of 32.10 per cent.

In "The Seventh Street Protestant Orphan Home," in New Orleans, under the sole medical care of Dr. E. A. Murphy, homœopath, there were 75 cases of the fever, 8 cases of black vomit, ranging in ages from one year and two months, to twenty-one years, *with a loss of one*, or 1.3 per cent. The eight black vomit cases recovered.

In further contrast with this homœopathic experience we quote from "The New Orleans Medical and Surgical Journal," March No. 1879,—"In the month of July, 1878, (from

21st to 31st inclusive), 37 whites were admitted into Charity Hospital with yellow fever, of which number 20 proved fatal, (54.2 per cent.) August, 363 and 203 deaths (55.9 per cent.) September, 292 cases and 145 deaths (49.6 per cent.) From the 1st to the 26th October, 87 cases and 35 deaths (40.2 per cent.) Total, July 21st to October 26th, 779 cases, and 403 deaths. The mortality amongst the whites suffering with yellow fever in the Charity Hospital was, therefore, *over fifty per cent.* (still in keeping with the calomel and quinine results of the 52 years previous in this same hospital, though under the well appointed care and nursing of the Sisters of Charity, who with the physicians in charge, are well acquainted with the management of this peculiar disease.) * * * According to the statistics compiled by Messrs. Dunlap and Parham, resident students of the Charity Hospital, of the total number of cases, 135 were contracted in the hospital, the patients being under treatment for other diseases at that time; 57 of these cases were fatal, (42.2 per cent.) Included in the above 135, were the house surgeon, assistant surgeon, six Sisters of Charity, and ten resident students—three Sisters of Charity and one student (the lamented and promising James Pepper, of Mobile) died from yellow fever.

With the notice of one more remarkable feature under this proof balance, *mortality*, in the summing of this whole chapter on yellow fever, and I cast my crumb upon the waters. This feature, which renders yellow fever, more than any other of its single consequences, the fearful scourge, and consequently, dreaded visitor to the domestic circle, is its frequent plural losses in, and to often complete extinction of, the entire household under the calomel and quinine regime —a feature positively unknown under the homœopathic practice; and to this searching question, put to the homœopathic profession by that veteran of medicine and old soldier in the experienced management of yellow fever, Dr. Wm. H. Holcombe, of New Orleans, in his circular letter, as chairman of the Homœopathic Yellow Fever Commission:

"Please state how many times you lost more than *one* patient in the same family or same house?"

The answer came (with list of cases, their names, address-

es, dates, &c.) that in 1,630 cases, with 90 deaths, a mortality of only 5.5 per cent. there occurred only *two deaths in the same family but six times under homœopathic treatment.*

What else but this *mortuary* experience, for the comparative average is the same in the treatment of all diseases, induces some of the most reliable life insurance companies to offer to the public risks at *ten per cent. lower rates?* And what has been the experience of these companies in the United States and in Europe? Why, simply that in fourteen years, out of seventy million of dollars at risk, by the Homœopathic Mutual Life Insurance Company of New York, the *homœopathic losses have been less than half of the allopathic*, and we find in the verified accounts of this Company, by the New York Insurance Department, that from the total number of policies issued to homœopaths, from July 18th, 1868, to September 30th, 1879, namely, 8,827, the mortality was 124; whereas, out of 2,466 policies issued to allopaths, the mortality was 89. *Of homœopaths only one in seventy-one, and of allopaths one in twenty-seven.* The risk taken by a life insurance company is a close business calculation on the amount of money to be made—it is a financial move of capitalists, *with the sole view of profit*—they do not risk a plan, and continue it for years at a loss of money to bolster up and advertise homœopathy. They have a reliable basis for calculation on the comparative statistics of the two schools, which are just as open to the critical inspection of the public, and of the medical profession, as to these great moneyed corporations; and as the occasional destruction by fire of an important building is life to fire insurance, and the like payment of a notable death policy in a community a stimulant to the business of life insurance, so are these fearful epidemics of yellow fever, the sad but surest means to stimulate medical investigation and comparative inquiry; stop this unnecessary mortality, destructive inland quarantine laws, and consequent demoralizing panics, which so seriously and justly reflect disgrace upon the medical profession.

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